Air Resources Board Stationary Source Division Workshop Summary

Workshop: Public Consultation Meeting on Compliance Flexibility in Gasoline

Regulations

Date: May 19, 1998

Location: 2020 L

Purpose: Consider changes to Predictive Models and other compliance elements of the

CaRFG regulations

Attendees: Refiners

Key Points:

Mobil Oil, ARCO, Exxon, Chevron, Equilon (Shell, Texaco), Tosco, Kern Oil,

WSPA, Amerada-Hess

Automakers

GM, Ford

Ethanol Industry

Parallel Products, Science Applications, Inc., TSS Consultants

Other

Sierra Research, A Second Opinion, Daedalus, Unocal

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WSPA agreed that the problems in revamping the exhaust regression models are too severe to resolve for a hearing in August. The exception is an adjustment to the response of emissions from LEVs to sulfur in gasoline, which the staff will pursue for August. The distinction in the sulfur slope between LEVs and the

"Tech 4" vehicles is well known and can be modeled.

The staff presented the results of work to date to determine why adding new data to the regression model dataset changes the "Tech 4" model so strongly. No reason has been demonstrated so far.

SAI, for the Renewable Fuels Council, presented the results of regression modeling of the Tech 4 database blocked according to vehicles with HC emissions exceeding, vs. less than, .37 g/mi. Using the block as a dummy variable greatly improved the slopes of HC versus RVP and versus oxygen, compared to the "new" model produced by the staff. There was question about whether or not this statistical outcome indicates an actual strong interaction between the vehicle emission level (within a "tech class") and

the emission slopes.

The staff presented a near-final outline of evaporative models for inclusion in the Predictive Models.

The staff presented near-final statistics on the relative reactivities of exhaust and evaporative emissions. These statistics will be used to discount the predictions for evaporative emissions before they are combined within the Predictive Models with exhaust emissions. More work will be done on the reactivity of running-loss emissions, for which current results may be low.

The staff will enlist mathematicians from industry to help iron-out residual issues of technical detail and to produce a spreadsheet with a complete revised Predictive Model.

OLA staff handed out draft regulatory language for "tightening up" provisions to thwart illegal blending under the cap limits.